

WHAT IS CLAIMED IS:

1 1. A formatting template for printing XML files, comprising a data map
2 format containing XML descriptors defining the formatting for elemental content of
3 the XML file.

1 2. The formatting template of claim 1 wherein the XML descriptors are
2 identified by a qualified tag.

1 3. The formatting template of claim 1 wherein the qualified tag comprises
2 a concatenation of XML element start tags that must be traversed in the XML file to
3 get to a particular element.

1 4. The formatting template of claim 1 wherein the qualified tag identifies a
2 description that is used to format the content for the element.

1 5. The formatting template of claim 4 wherein the qualified tag is
2 generated whenever a start tag is encountered.

1 6. The formatting template of claim 4 wherein the qualified tag is modified
2 whenever a start tag is encountered.

1 7. The formatting template of claim 1 wherein the XML file to be printed is
2 parsed into element contents that can be broken into fields and processed using a
3 chain of field XMDS.

1 8. The formatting template of claim 7 wherein the element contents are
2 broken into fields either with byte counts or with delimiters.

1 9. The formatting template of claim 1 wherein a chain of attribute XMDS
2 are used for formatting attributes, wherein the attributes are broken into fields, the
3 fields being formatted with a chain of field XMDS.

1 10. A printing system, comprising:
2 a spooler for receiving printable information from the print channel;
3 a print services facility for parsing an XML file, formatting the XML file
4 according to a formatting template, the print services facility organizing a data
5 stream representing the formatted XML file and generating a print steam having
6 been formatted using the formatting template; and
7 a printer for printing the print steam according to the formatting defined by the
8 formatting template;
9 wherein the formatting template defines a data map format containing XML
10 descriptors defining the formatting for an element of the XML file.

1 11. The printing system of claim 10 wherein the XML descriptors are
2 identified by a qualified tag.

1 12. The printing system of claim 10 wherein the qualified tag comprises a
2 concatenation of XML element start tags that must be traversed in the XML file to
3 get to a particular element.

1 13. The printing system of claim 10 wherein the qualified tag identifies a
2 description that is used to format the content for the element.

1 14. The printing system of claim 13 wherein the qualified tag is generated
2 whenever a start tag is encountered.

1 15. The printing system of claim 13 wherein the qualified tag is modified
2 whenever a start tag is encountered.

1 16. The printing system of claim 10 wherein the XML file to be printed is
2 parsed into element contents that can be broken into fields and processed using a
3 chain of field XMDS.

1 17. The printing system of claim 16 wherein the element contents are
2 broken into fields either with byte counts or with delimiters.

1 18. The printing system of claim 10 wherein a chain of attribute XMDS are
2 used for formatting attributes, wherein the attributes are broken into fields, the fields
3 being formatted with a chain of field XMDS.

1 19. A method for printing XML files directly using a formatting template,
2 comprising:
3 placing an XML file to be printed on a server spool;
4 providing a formatting template to a print services facility, wherein the
5 formatting template defines a data map format containing XML descriptors defining
6 the formatting for an element of the XML file; and
7 pulling the XML file from the spooler for generating a formatted print stream
8 using the formatting template.

1 20. The method of claim 19, further comprising:
2 parsing the XML file to be printed into elemental content;
3 searching the formatting template for formatting instructions for a parsed element
4 content;
5 determining whether the search was successful;
6 formatting the element content using formatting instructions obtained by the
7 search; and
8 determining whether the end of the document has been reached.

1 21. The method of claim 20, further comprising continuing to process
2 parsed element content when the end of the document is not reached.

1 22. The method of claim 21, further comprising sending the formatted data
2 stream to a printer.

1 23. The method of claim 19 wherein the formatting template comprises a
2 chain of attribute XMDS for formatting attributes, wherein the attributes are broken
3 into fields, the fields being formatted with a chain of field XMDS.

1 24. An article of manufacture comprising a program storage medium
2 readable by a computer, the medium tangibly embodying one or more programs of
3 instructions executable by the computer to perform a method for printing XML files
4 directly using a formatting template, the method comprising:
5 placing an XML file to be printed on a server spool;
6 providing a formatting template to a print services facility, wherein the
7 formatting template defines a data map format containing XML descriptors defining
8 the formatting for an element of the XML file; and
9 pulling the XML file from the spooler for generating a formatted print stream
10 using the formatting template.

1 25. The article of manufacture of claim 24, further comprising:
2 parsing the XML file to be printed into elemental content;
3 searching the formatting template for formatting instructions for a parsed element
4 content;
5 determining whether the search was successful;
6 formatting the element content using formatting instructions obtained by the
7 search; and
8 determining whether the end of the document has been reached.

1 26. The article of manufacture of claim 25, further comprising continuing to
2 process parsed element content when the end of the document is not reached.

1 27. The article of manufacture of claim 26, further comprising sending the
2 formatted data stream to a printer.

1 28. The article of manufacture of claim 24 wherein the formatting template
2 comprises a chain of attribute XMDS for formatting attributes, wherein the attributes
3 are broken into fields, the fields being formatted with a chain of field XMDS.

1 29. A printing system, comprising:
2 spooler means for receiving printable information from the print channel;
3 print driver means for parsing an XML file, formatting the XML file according
4 to a formatting means, the print services facility organizing a data stream
5 representing the formatted XML file and generating a print steam having been
6 formatted using the formatting template; and
7 printing means for printing the print steam according to the formatting defined
8 by the formatting template;
9 wherein the formatting means defines a data map format containing XML
10 descriptors defining the formatting for an element of the XML file.